

ABSTRACT

A receiver system processes a received optical signal that carries user information. The receiver system includes a splitter, a first converter, a second converter, and a detection system. The splitter splits the received optical signal based on polarization into a first optical signal and a second optical signal. The first converter converts the first optical signal into a corresponding first electrical signal. The second converter also converts the second optical signal into a corresponding second electrical signal. The detection system applies radio frequency detection to the first electrical signal to generate a third electrical signal. The detection system applies radio frequency detection to the second electrical signal to generate a fourth electrical signal. The detection system then combines the third electrical signal and the fourth electrical signal to form a fifth electrical signal that carries the user information.